ORIGINAL

0000007387

BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

1999 OCT 29 P 4: 05

AZ CORP COMMISSION
DOCUMENT CONTROL

CARL J. KUNASEK
Chairman

JAMES M. IRVIN
Commissioner

WILLIAM A. MUNDELL
Commissioner

Arizona Corporation Commission
DOCKETED
OCT 29 1999
DOCKETED BY

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	Docket No. T-00000B-97-0238 **AT&T AND TCG's SUPPLEMENTAL COMMENTS ON PERFORMANCE MEASURES**

AT&T Communications of the Mountain States, Inc. and TCG Phoenix (collectively "AT&T") submit the following Supplemental Comments on Performance Measures.

I. U S WEST's Process For Coordinated Cutovers of Unbundled Loops With Number Portability Does Require U S WEST to Call the CLEC at the Completion of the Loop Cutover.

There was much discussion at the October 1, 1999 workshop on the issue of whether or not U S WEST Communications, Inc. ("U S WEST") is required to call and inform a competitive local exchange carrier ("CLEC") once it has completed the cutover of an unbundled loop. The discussion was held in the context of what performance measures are appropriate to measure U S WEST's performance in providing unbundled loops coordinated with number portability. At that workshop, both Nancy Lubamersky and Jeff Owens of U S WEST stated unequivocally on numerous occasions that the U S WEST processes for loop installations do not require U S WEST to call and inform the

CLEC that it had completed the loop cutover. In fact, U S WEST's processes do require U S WEST to call a CLEC and inform it that U S WEST has completed the loop cutover.

U S WEST produced its unbundled loop provisioning flow as an exhibit to the testimony of Karen Stewart in its Section 271 application in this state.[1] For ease of reference, Ms. Stewart's relevant exhibits are attached to these comments as Exhibit A. The provisioning process in Ms. Stewart's testimony includes Task No. 16 which requires, "[U S WEST] Implementor Contacts CLEC to Advise Order Complete."[2] Ms. Stewart also provided a task list that describes Task No. 16 in the U S WEST unbundled loop provisioning process as, "CLEC notified via phone call to accept service and begin billing."[3]

U S WEST also provided via email a newer version of its unbundled loop provisioning flow to AT&T on August 12, 1999.[4] Attached to that email was a file containing U S WEST's unbundled loop provisioning flow. For ease of reference, a copy of the email and the file attached to the email are attached to this document as Exhibit B. The newer version of U S WEST's unbundled loop provisioning flow includes the process step "Implementor Contacts Co-Carrier to Advise Order Complete."[5] U S WEST also shows a Task No. 14 in its unbundled loop provisioning flow that states that the U S WEST Des Moines Design Service Center is responsible for contacting the CLEC. ("Implementor contacts Co-Provider to advise order complete.")[6]

---

[1] Before the Arizona Corporation Commission, *In the Matter of U S WEST Communications, Inc.'s Compliance With §271 of the Telecommunications Act of 1996*, Docket No. T-00000B-97-0238, Affidavit of Karen A. Stewart, March 25, 1999, Exhibit KAS-03. ("Stewart Affidavit")
[2] Stewart Affidavit, Exhibit KAS-03A, p. 2.
[3] Stewart Affidavit, Exhibit KAS-03B, p. 3.
[4] Email from Christina Valdez (U S WEST) to Terry Manning (AT&T).
[5] Exhibit B, Unbundled Loop Provisioning Flow, p. 2.
[6] Exhibit B, Unbundled Loop Provisioning Flow, p. 7.

U S WEST's own document describes its obligation to contact the CLEC after it has completed the unbundled loop installation activity. As was discussed at the October 22, 1999 workshop, sound process engineering requires that U S WEST call the CLEC and inform the CLEC that the unbundled loop has passed testing and been successfully migrated to the CLEC before the CLEC completes the tasks required to port the customer's telephone number. Ms. Lubamersky's and Mr. Owens' incorrect and unequivocal assertion that U S WEST's processes did not require it to contact the CLEC after the unbundled loop was installed unfortunately brought the discussion of performance measures for coordinated unbundled loop and number portability to a standstill.

This is the second time that U S WEST's lack of knowledge, or misrepresentation, of its own processes wasted valuable workshop time. The first time was at the October 1, 1999 workshop where Mr. Dean Buhler and Mr. Andrew Crain of U S WEST stated unequivocally that IMA was available for CLECs to perform pre-ordering and ordering functions twenty-four hours a day, seven days a week except for short periods of maintenance.[7] At the October 21, 1999 workshop, U S WEST admitted that those representations by Mr. Buhler and Mr. Crain were incorrect and that IMA was only available to CLECs from 6:00 A.M. to 8:00 P.M., Monday through Friday. The workshops would proceed more efficiently and there would be far less delay in the entire collaborative process if U S WEST's representatives were familiar with U S WEST processes.

[7] Transcript from October 1, 1999 Workshop, pp. 95 – 96.

II. Measures for Unbundled Loop and Number Portability Coordinated Conversions

At the last workshop, AT&T agreed to propose measurements for U S WEST's performance in providing coordinated unbundled loops with number portability to CLECs. AT&T is proposing two measures that cover the timeliness of the unbundled loop with number portability services, and the time a customer will be without service during the conversion. Before proposing the measures, it is necessary to understand the process that must be followed for a successful conversion of unbundled loops with number portability to occur.

When an unbundled loop from an existing U S WEST customer is converted to a CLEC there is no escaping the fact that the customer will be without telephone service for some period of time. It is also a fact that customers with existing U S WEST service that switch to a CLEC that provides local service (in part through the use of U S WEST unbundled loops) will, in the majority of situations (>90% of the time), also need their number to be ported to the CLEC. The completion of the number porting process will result in a period of time in which the customer is unable to receive telephone calls. Coordinated conversions of unbundled loops with number portability between U S WEST and the CLEC allow the cutover time to occur when it is least inconvenient for a customer to be without telephone service. Coordinated conversions also permit the CLEC and U S WEST to cooperatively minimize the time the customer is without telephone service or unable to receive telephone calls.

Typically, the CLEC will negotiate with the customer and select the date and time on which it is least inconvenient for the customer to be without telephone service. In its order for unbundled loop conversions with number portability, the CLEC will request the

due date and the time on that due date when the CLEC wants the conversion to begin. The time in which the conversion should begin is called the frame due time ("FDT"). After receiving the order, U S WEST will respond back with a confirmation of the committed due date and the committed FDT.

On the due date and at the FDT, U S WEST should call the CLEC and confirm with the CLEC that the unbundled loop conversion should begin. After CLEC concurrence, the U S WEST central office technician will first confirm that the right customer's loop is being converted. The verification can be done with test equipment that will look towards U S WEST's switch and read the customer's automated number identifier ("ANI"). After confirming that the right loop is being converted, the U S WEST technician should also look towards that CLEC switch with the same test equipment and verify that the loop will be linked to the CLEC switch with the right ANI. If the U S WEST technician determines through testing that the "from" and "to" points have some problem, (*i.e.*, the ANI on the "from" point does not match the ANI on the service order, or the "to" point does not have working dial tone) the technician should not convert the loop. A conversion after testing that has showed problems will result in a customer being without service for an extended period of time.

After confirming that the "from" and "to" points are accurate and without problems, the technician can begin the mechanical process of converting the loop. The process includes lifting the loop off the U S WEST frame and laying it on the point of the frame that leads to the CLEC's switch. After completing the lift and lay and completing any other testing, U S WEST will call the CLEC to inform the CLEC that the loop conversion has been completed. The window of time in which U S WEST is expected to

complete its obligations for coordinated conversions of unbundled loops with number portability, including the final call to the CLEC, is within one hour of the FDT.

Since the customer is expecting to be out of service beginning on the due date and at the FDT, it is critical that the conversion starts at the FDT. If U S WEST starts the conversion before the FDT, the customer will be out of service before expected and customer dissatisfaction with the CLEC is a likely result. If U S WEST does not start the conversion until well after the FDT, the customer will be out of service at a time it did not expect and customer dissatisfaction with the CLEC will again result. Coordinated conversions of unbundled loops with number portability are unique in that the commitment that U S WEST makes is not just for the day the conversion is to take place, it also commits to start the conversion at the FDT and complete it within one hour of the FDT.

Prior to the due date for the conversion of the unbundled loop, the steps to perform the porting of the customer's number should have started. Those steps will result in a trigger being established that will be "tripped" when the CLEC sends an electronic message to complete the number porting process. The CLEC should send the message porting the number to the national number portability database as close to the end of the completion of the loop conversion as possible. If the CLEC completes the number porting process before the loop has been migrated by U S WEST the customer will be unable to receive telephone calls. The time between the completion of the loop conversion and the completion of the number porting is time that the customer is unable to receive telephone calls. The customer will have dial tone from the CLEC's switch and will be able to make calls, but the customer will be unable to receive calls because the

network has not been notified to route incoming calls from the customer's former switch (U S WEST's) to the customer's new switch (the CLEC's).

To ensure that the customer's number is not ported prematurely, the CLEC should wait until U S WEST informs it that the unbundled loop has been successfully migrated and tested before completing the final number portability steps. U S WEST's work is not complete until it calls the CLEC to inform it that the loop has been tested and successfully migrated. To determine the total time that a customer will be out of service (*i.e.*, no dial tone and/or and inability to receive telephone calls) that can be attributed to situations under the control of U S WEST, the time that U S WEST lifts the loop from its frame should be subtracted from the time the U S WEST calls the CLEC to inform the CLEC that the loop has been migrated and has passed all of the required tests.

To measure the total time that the customer is out of service as a result of activities that can be attributed to U S WEST, AT&T proposes that measure OP-9 be revised as follows:

Purpose:

Evaluates the combined effect on customer out-of-service time from coordinated cutovers of both unbundled loops and ~~interim~~ number portability and the ability of U S WEST to meet its provisioning commitments.

Description:

OP-9A- Measures the Average time (beginning to end) to complete a coordinated cutover of an unbundled loop combined with ~~Interim~~ Number Portability.

- All orders for unbundled loops coordinated with ~~INP~~ number portability that are completed/closed during the reporting period are measured, subject to exclusions specified below.

OP-9B – Measures the percent commitments met for a coordinated cutover of an unbundled loop combined with number portability.

- A commitment is considered met by U S WEST for unbundled loop conversions with number portability if U S WEST starts the loop conversion on the due date and after the frame due time ("FDT") and calls to inform the CLEC that the conversion has been completed within one hour after the FDT.

Units of Measure:

- OP-9A Minutes and seconds
- OP-9B % Commitments Met

Formulas:

OP-9A= Σ[(Date and Time That U S WEST Informs the CLEC That the Loop Conversion Has Been Completed ~~Earlier of Loop "Lift" time or INP start time)~~ — (~~Later of~~ Loop "Lift" ~~"Lay" time or INP complete time~~)]/ (Total Number of Coordinated Unbundled Loop with INP number portability cutovers)

OP-9B = [Total Coordinated unbundled loop with number portability order commitments met / Total Number of Coordinated unbundled loop with number portability orders] x 100

To measure the degree to which U S WEST fulfills its provisioning obligations with respect to coordinated cutovers of unbundled loops and number portability, AT&T proposes that measure OP-7 be revised as follows:

Purpose:

Evaluates the timeliness and convenience of coordinated cutovers of unbundled loops, focusing on the ability of U S WEST to meet its provisioning commitments for unbundled loops with and without number portability ~~time actually involved in disconnecting the loop from the U S WEST network and connection it for the CLEC to use~~.

Description:

Measures the average time to complete coordinated unbundled loop cutovers, based on intervals beginning with the "lift" time and ending with the "lay" time.

III. Comments on Performance Measures That Were Not Discussed During the October 21 – 22, 1999 Workshops

During the October 21 – 22, 1999 workshops, not all of the performance measurements that were proposed by U S WEST were discussed. AT&T will provide written comments that it would have provided orally at the last workshops. While the transcripts of the last workshops are not yet available, it is the recollection of the AT&T representatives at the workshop that measure DPO-5 was the first of the remaining measures not discussed.

A. DPO-5 Pre-Order Response Times for U S WEST Retail Transactions.

The unit of measure that U S WEST proposed for this measure is minutes and seconds. Query/response times of this type are typically expressed in units of seconds. In fact, U S WEST has already reported query/response time results in units of seconds in its Section 271 application.[8] To ensure that U S WEST's description of this measure accurately reflects the way the U S WEST reports this measure, the unit of measure should be changed from minutes and seconds to seconds.

U S WEST indicated during the last workshops that it would be including in the 4.2 release of IMA the capability to perform ADSL facility checks. Ms. Lynn Notarianni of U S WEST stated that, presently, U S WEST had no plans to include the

query/response time for the ADSL facility check in its PO-1 measure of CLEC query/response time, but that U S WEST would consider adding that capability. AT&T recommends that the query/response time for the ADSL facility check be included in measurement PO-1. Additionally, AT&T recommends that U S WEST should include the query/response time for the ADSL facility check that its own representatives perform in measure DPO-5. To implement this recommendation, AT&T recommends that ADSL facility check should be added to the Disaggregation Reporting of measure DPO-5 as transaction type number 7.

In measure DPO-5, as with measure PO-1, U S WEST has excluded failed or rejected requests/errors from the measurement results. AT&T believes that failed or rejected queries should be included in the calculation. It has been AT&T's experience that with some local exchange carriers ("LECs"), when there is a failed or rejected pre-order query, the error notification is extremely slow in coming or does not come at all. To appropriately examine the time and manner in which a CLEC and U S WEST are notified of failed or rejected queries, AT&T proposes that failed or rejected queries for the pre-order transactions be separately reported. Both California[9] and New York[10] have included failed/rejected query response times in their list of required performance measures. Arizona would be well served to include a measure of failed/rejected query response time in its list of performance measures as well. To that end, AT&T

---

[8] Before the Arizona Corporation Commission, *In the Matter of U S WEST Communications, Inc.'s Compliance With §271 of the Telecommunications Act of 1996*, Docket No. T-00000B-97-0238, Affidavit of Michael G. Williams, March 25, 1999, Exhibit MGW-2, p. 7. ("Williams Affidavit")

[9] Before the Public Utilities Commission of the State of California, *Order Instituting Rulemaking on the Commission's Own Motion In Monitoring Performance of Operations Support Systems*, R. 97-10-16, Joint Motion for Adoption of Partial Settlement Agreement Pursuant to Article 13.5 of the Commission's Rules of Practice and Procedure, Jan. 7, 1999, Attachment A, p. 7. ("California Settlement Agreement").

[10] New York State Carrier-to-Carrier Guidelines, Performance Standards and Reports, *Bell Atlantic Reports*, Compliance Filing, July 12, 1999 ("NY Performance Measurements"), p. 6.

recommends that failed/rejected queries be added to measure DPO-5 as transaction type number 8.

B. DPO-6 Order Completion Notifications Transmitted within 24 hours and DPO-7 Order Completion Notification Interval

U S WEST starts the clock on its order completion notice interval measurements when it completes the order in its internal operations support systems ("OSS"). This "start time" is inconsistent with the time that the Federal Communications Commission ("FCC") proposes. The FCC proposes that the start time for the order completion notice interval measurements should be when the physical installation of work is completed. The FCC has tentatively concluded that, "an incumbent LEC must use the measurement set forth in Appendix A and must measure the interval by subtracting the date and time that it completed the work from the date and time a valid completion notice leaves its OSS interface."[11]. In Appendix A referenced above, the FCC defines the average completion notice interval as, "[Σ [(Date and Time of Notice of Completion) - (Date and Time of Completion of Work)]]/Number of Orders Completed in Reporting Period."[12]. The FCC has also stated that, "[t]here should not be a material difference in time between the actual installation of service and the competing carrier's receipt of an order completion notice."[13]. Finally, the FCC has tentatively concluded that, "all incumbent LECs must also measure these intervals [including average completion notice interval]

---

[11] *In the Matter of Performance Measurements and Reporting Requirements for Operational Support Systems, Interconnection, and Operator Services and Directory Assistance*, FCC Docket No. 98-56, Notice of Proposed Rulemaking (rel. April 17, 1998), ¶ 64 ("*Performance Measurements NPRM*") (emphasis added).

[12] *Performance Measurements NPRM,* Appendix A, p. A-4 (emphasis added).

[13] *Application of BellSouth Corporation Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region InterLATA Services in South Carolina*, CC Docket No. 97-208, ("*BellSouth South Carolina Order*"), ¶ 139 (emphasis added).

for themselves, whether or not they have done so previously, in order to provide a basis for comparison with the average intervals for competing carriers."[14]

Pacific Bell and GTE have agreed in California to start the clock on completion notice intervals at the time the actual work is completed. The formula for the completion notice interval in California is, "[s]um ((Date and Time of Completion Notification to CLEC) - (Date and Time of Work Completion)) / (Number of Orders Completed)."[15]

U S WEST's proposed measures exclude the time from when the service is actually installed to the time the order is completed in U S WEST's OSS. This excluded interval will typically be several hours in duration. To be consistent with the FCC's expectation of the start time for order completion notices, AT&T proposes that the start time for any order completion notice measurement be defined as the time the completion of the actual work occurs. Specifically, AT&T recommends the following revisions to Measures DPO-6 and DPO-7:

> DPO-6 Order Completion Notifications Transmitted within 24 hours:
>
> **Purpose:**
>
> Reports the timeliness of completion notification, focusing on the percentage of notifications transmitted within 24 hours of the date and time the physical installation work for orders ~~are~~ is completed.
>
> **Description:**
>
> Measures the number of completion notifications transmitted within 24 hours of the completion of the physical installation work as a percentage of all orders completed in the reporting period.

[14] *Performance Measurements NPRM,* ¶ 59.
[15] California Settlement Agreement, Attachment A, p. 37.

Formula:

[(Total Number of Completion Notifications Transmitted within 24 hours of the completion of the physical installation work) / (Total Number of Orders Completed)] x 100

Explanation:

The percentage is calculated by dividing the number of completion notifications transmitted to CLECs within 24 hours of the completion of the physical installation work by the total number of orders completed in the reporting period.

DPO-7 Order Completion Notification Interval:

Purpose:

Reports the timeliness of completion notifications, focusing on the time from the completion of the physical installation work until ~~it takes for~~ such notifications ~~to be~~ are transmitted to the CLECs.

Description:

Measures the time interval between the completion of the physical installation work ~~order fulfillment~~ and transmission of the completion notification to the CLEC.

Formula:

[(Date & Time of Completion Notice was Transmitted) – (Date & Time the physical installation work ~~Order~~ was completed)] / Number of Orders Completed

C. DOP-2 Percent Delayed Orders Completed more than 15 days past the commitment date and DOP-3 Percent Delayed Orders Completed more than 90 days past the commitment date

U S WEST's proposed measure excludes orders where U S WEST committed due dates are missed for facilities reasons. This exclusion is entirely inappropriate.

U S WEST should consider facility availability reasons when it first provides a

committed due date to the CLEC. Checking facility availability only after U S WEST has provided a committed due date to the CLEC is too late.

In fact, U S WEST has explicitly included orders with due dates missed for facility reasons in its OP-3 Installation Commitments Met measurement. Orders with due dates missed for facility reasons should be treated consistently between measures OP-3, DOP-2 and DOP-3. Therefore, AT&T proposes that "facilities" be deleted from the list of exclusions for measures DOP-2 and DOP-3

Finally, as was discussed during the last workshop, these measures should include reporting for analog unbundled loops, digital unbundled loops, non-loaded unbundled loops, unbundled dedicated interoffice transport and combinations of network elements (including, but not limited to, the unbundled network element platform ("UNE-P") and the enhanced extended link ("EEL")) in addition to the products already identified in the measure.

D. DMR-1 Customer-caused Trouble Reports

As a clean-up item, the formula for this measure refers to "CLEC or CLEC's customer" caused trouble reports. Agreements had been reached at prior workshops for similar measures that the modifier "CLEC or CLEC's" would be deleted and reference would be to customers in general and not limited to only CLEC or CLEC's customers.

The list of products for which U S WEST would report results for this measure does not include analog unbundled loops, digital unbundled loops, non-loaded unbundled loops, unbundled dedicated interoffice transport and combinations of network elements (including, but not limited to, the UNE-P and EEL). AT&T recommends that these

products be added to the U S WEST listing of proposed products for which results will be reported.

E. DCP-2 Average Collocation Feasibility Study Interval and DCP-4 Average Collocation Quote Interval

U S WEST excludes from these two measures "CLEC requested due date beyond standard interval." It is unclear why this exclusion is necessary. Consequently, AT&T recommends that this exclusion should be deleted for both measures. When CLECs request collocation from U S WEST, they generally expect that the feasibility study and the quotation preparation will be completed as soon as possible. CLECs do not request specific due dates for delivery of feasibility studies or quotations. CLECs may request that the collocation be installed in longer than U S WEST's standard collocation intervals. However, in those cases, the CLECs will still expect feasibility studies and quotations to be provided as soon as possible. The fact that a CLEC may need collocation installed in longer than the standard installation interval does not authorize U S WEST to take longer to provide feasibility studies or quotations.

F. DNP-1 U S WEST Local Interoffice Trunks Provisioned by Scheduled Date, and DNP-3 U S WEST Local Interoffice Trunk Provisioning Late Days (average)

These two measures only include orders for direct final and alternate final trunk groups. They do not include orders for non-final trunks. Non-final trunks represent the majority of interoffice trunks in U S WEST's network. There is no logical reason why U S WEST would exclude trunks that represent the majority of its interoffice trunks from

these measures. AT&T recommends that results for non-final trunks be separately reported for this measure.

G. DNP-2 U S WEST Local Interoffice Trunks Provisioning Interval (average)

The results for this measure will presumably be compared to the OP-4 Installation Interval results for interconnection trunks. The OP-4 measure excludes orders with customer requested due dates beyond the standard installation interval. The DNP-2 excludes no such orders. In order to provide consistent treatment of U S WEST and CLEC data, U S WEST interoffice trunk orders with long intervals should also be excluded from the DNP-2 measure.

AT&T recognizes that U S WEST claims it has no standard intervals for the provisioning of its own interoffice trunks. However, the standard intervals that U S WEST defined for CLEC interconnection trunks can be easily applied to the U S WEST interoffice trunks orders. Eighteen business days is the U S WEST standard interval for interconnection trunk arrangements typically ordered by CLECs. AT&T recommends that the DNP-2 measure be modified such that internal orders with scheduled dates longer than eighteen days past the internal request date should be excluded from the results. AT&T proposes the following changes to measure DNP-2:

Exclusions:

- Toll trunks and trunks that are not connected to the public switched network.
- Internal requests with requested due dates that are greater than 18 days past the internal request date.

For the reasons discussed in the section on measures DNP-1 and DNP-3, AT&T also recommends that results for non-final trunks be separately reported for this measure.

H. DNR-1 U S WEST Local Interoffice Trunks Mean Time to Restore and DNR-2 U S WEST Local Interoffice Trunks All Troubles Cleared within 4 hours.

The scope of U S WEST's proposed measures include all interoffice trunks. This scope would include direct final, alternate final and non-final interoffice trunks. There is a greater sense of urgency to repair final and alternate trunks that are out of service than for non-final trunks. Consequently, it would be reasonable to assume that non-final trunks will be repaired in a much longer interval than will direct and alternate final trunk groups.

To reflect the different treatment afforded to final and non-final trunks, U S WEST should report results for these two measures disaggregated by final and non-final interoffice trunks. This will allow the Commission to determine the degree to which U S WEST repairs final trunks faster than non-final trunks.

III. Additions to Existing Measures

DPO-4 Firm Order Confirmation (FOC) Interval

The measure proposed by U S WEST is focused entirely on the average firm order confirmation ("FOC") interval. While it is important to know how long it takes the average FOC to be provided to a CLEC, it is also important for the FOC to be delivered within the interval that is indicated in interconnection agreements. To that end, AT&T proposes that a measure of the percent of FOCs received on time be added to the DPO-4

measure of FOC interval. Specifically, AT&T recommends that following additions be made to measure DPO-4:

Description:

DPO-4A-D Measures the average time for U S WEST to provide a Firm Order Confirmation (FOC) in response to a customer LSR/ASR received from the CLEC.

- Includes all LSR's that are submitted during the reporting period through the specified interface or in the specified manner (i.e., facsimile) that receive ~~an~~ FOC.
- The interval measured is the period between U S WEST's receipt of the LSR/ASR and U S WEST's response with a FOC notification.

DPO-4E-H Measures the percent of FOCs that U S WEST provides on time.

- Includes all LSR's that are submitted during the reporting period through the specified interface or in the specified manner (*i.e.*, facsimile) that receive a FOC.
- A FOC is considered to be on time if it is provided to the CLEC within the intervals contained in the particular CLEC's interconnection agreement.

Units of Measure:

DPO-4A – D ~~Business Days~~ Hours and Minutes
DPO-4E – H Percent
Disaggregation Reporting: State wide level.

Results for this indicator are reported according to the electronic gateway interface or manual method used to submit the LSR/ASR:

DPO-4A	LSRs received via IMA
DPO-4B	LSRs received via Exact
DPO-4C	LSRs received via EDI
DPO-4D	LSRs received via Facsimile
DPO-4E	LSRs received via IMA
DPO-4F	LSRs received via Exact
DPO-4G	LSRs received via EDI
DPO-4H	LSRs received via Facsimile

Formula:

DPO-4A – D Σ[(Date and Time of FOC Notification) – (Date and Time of LSR Receipt)] / (Total Number of FOC Notifications Transmitted).

DPO-4E – H [Total Number of FOCs provided on time / total number of FOCs transmitted.

RESPECTFULLY SUBMITTED this 29th day of September, 1999.

AT&T COMMUNICATIONS OF
THE MOUNTAIN STATES, INC.
AND TCG PHOENIX

By: _____

Andy Hurwitz
Joan Burke
Osborn Maledon
The Phoenix Plaza
2929 N. Central Avenue
21st Floor
Phoenix, AZ 85012-2794
Phone: (602) 640-9356
Fax: (602) 640-6074

Thomas C. Pelto
Mary B. Tribby
Richard S. Wolters
1875 Lawrence Street
Suite 1575
Denver, Colorado 80202
Telephone: 303-298-6471
Facsimile: 303-298-6301
E-mail: rwolters@att.com

CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of AT&T and MCIW's Comments on Selection Criteria were filed this 29th day of September, 1999, with:

Arizona Corporation Commission
Docket Control – Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and that a copy of the foregoing was sent via United States Mail, postage prepaid, this 29th day of September, 1999 to the following:

David Motycka
Arizona Corporation Commission
Acting Assistant Director of Utilities
1200 West Washington Street
Phoenix, AZ 85007

Maureen Scott
Legal Division
Arizona Corporation Commission
Director of Utilities
1200 West Washington Street
Phoenix, AZ 85007

Mark A. DiNunzio
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Thomas H. Campbell
40 N. Central Avenue
Phoenix, AZ 85004

Timothy Berg
Fennemore Craig, P.C.
3003 North Central Ave., #2600
Phoenix, AZ 85012

Michael M. Grant, Esq.
Gallagher and Kennedy
2600 North Central Ave.
Phoenix, AZ 85004-3020

Thomas M. Dethlefs, Esq.
U S WEST Communications, Inc.
1801 California Street, #5100
Denver, CO 80202

Lex J. Smith
Michael W. Patten
Brown & Bain, P.A.
P. O. Box 400
2901 North Central Ave.
Phoenix, AZ 85001-0400

Thomas F. Dixon
MCI Telecommunications Corporation
707 – 17th Street, #3900
Denver, CO 80202

Carrington Phillip
Fox Communications, Inc.
1400 Lake Hearn Drive, N.E.
Atlanta, GA 30319

Scott Wakefield
Stephen Gibelli
Residential Utility Consumer Office
2828 North Central Ave., #1200
Phoenix, AZ 85004

Daniel Waggoner
Davis Wright Tremaine
2600 Century Square
1502 Fourth Avenue
Seattle, WA 98101-1688

Karen Johnson
Penny Bewick
Electric Lightwave, Inc.
4400 NE 77th Ave
Vancouver, WA 98662

Charles Kallenbach
American Communications Services, Inc.
131 National Business Parkway
Annapolis Junction, MD 20701

Mark Dioguardi, Esq.
Tiffany and Bosco, P.A.
500 Dial Tower
1850 North Central Ave.
Phoenix, AZ 85004

Joyce Hundley
United States Dept. of Justice
Antitrust Division
1401 H Street NW, Suite 8000
Washington, DC 20530

Alaine Miller
NEXTLINK Communications, Inc.
500 108th Avenue NE, Suite 2200
Bellevue, WA 98004

Stephen H. Kukta
Sprint Communications Company L.P.
8140 Ward Parkway 5E
Kansas City, MO 64114

Richard M. Rindler
Morton J. Posner
Swidler & Berlin Shereff Friedman, LLP
3000 K Street, N.W. – Suite 300
Washington, D.C. 20007-5116

Bill Haas
Richard Lipman
McLeod USA
6400 C Street SW
Cedar Rapids, IA 54206-3177

Richard Smith
Director of Regulatory Affairs
Cox Communications
2200 Powell Street, Suite 795
Emeryville, CA 94608

Kath Thomas
Brooks Fiber Communications
1600 South Amphlett Blvd., #330
San Mateo, CA 94402

Raymond S. Heyman, Esq.
Randall H. Warner, Esq.
Roshka Heyman & DeWulf
Two Arizona Center
400 N. Fifth Street, Suite 1000
Phoenix, AZ 85004

Thomas L. Mumaw, Esq.
Snell & Wilmer L.L.P.
One Arizona Center
Phoenix, AZ 85004-0001

Robert Munoz
WorldCom, Inc.
225 Bush Street, Suite 1900
San Francisco, CA 94014

Douglas Hsiao
Rhythms Links Inc.
6933 Revere Parkway
Englewood, CO 80112

Jeffrey W. Crockett
SNELL & WILMER
One Arizona Center
Phoenix, AZ 85004-0001

Diane Bacon, Legislative Director
Communications Workers of America
Arizona State Council
District 7 AFL-CIO, CLC
5818 N. 7th Street, Suite 206
Phoenix, AZ 85014-5811

Jim Scheltema
Blumenfeld & Cohen
1625 Massachusetts Ave. N.W.
Suite 300
Washington, DC 20036

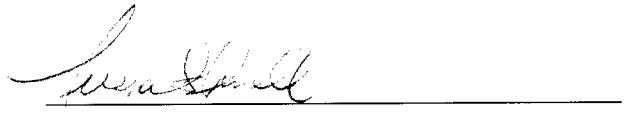
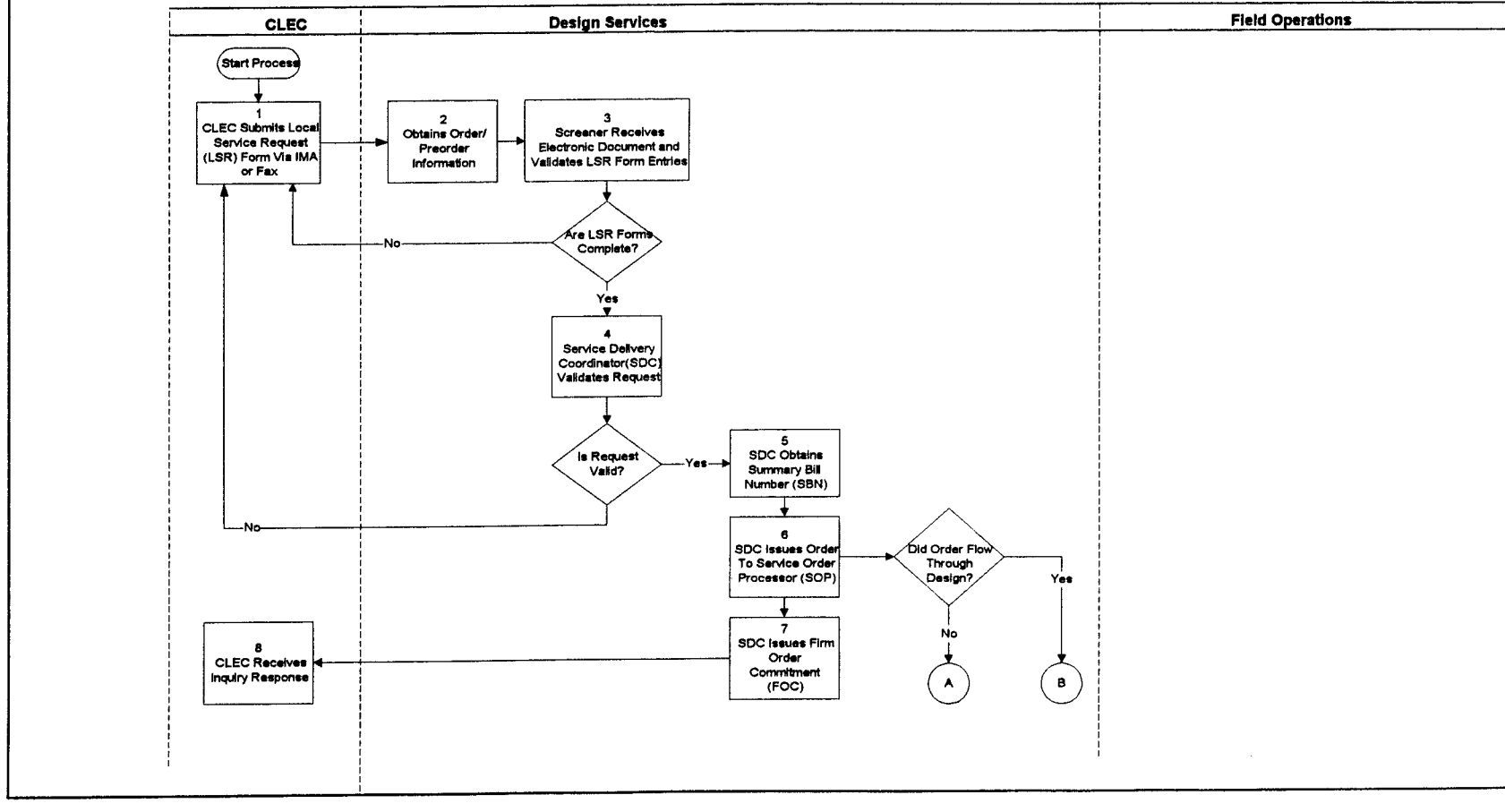
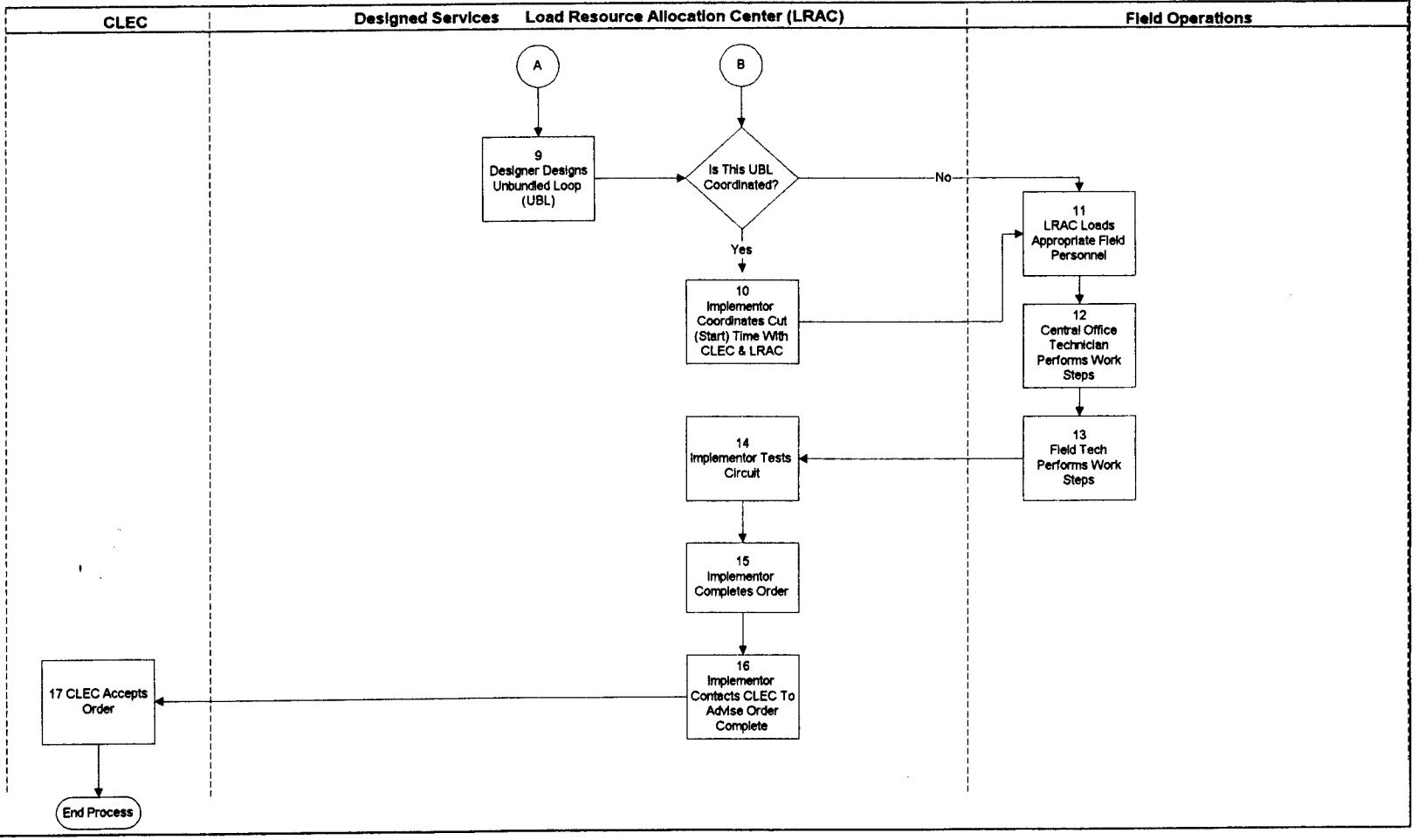


EXHIBIT
A

UNBUNDLED LOOP PROVISIONING FLOW



UNBUNDLED LOOP PROVISIONING FLOW



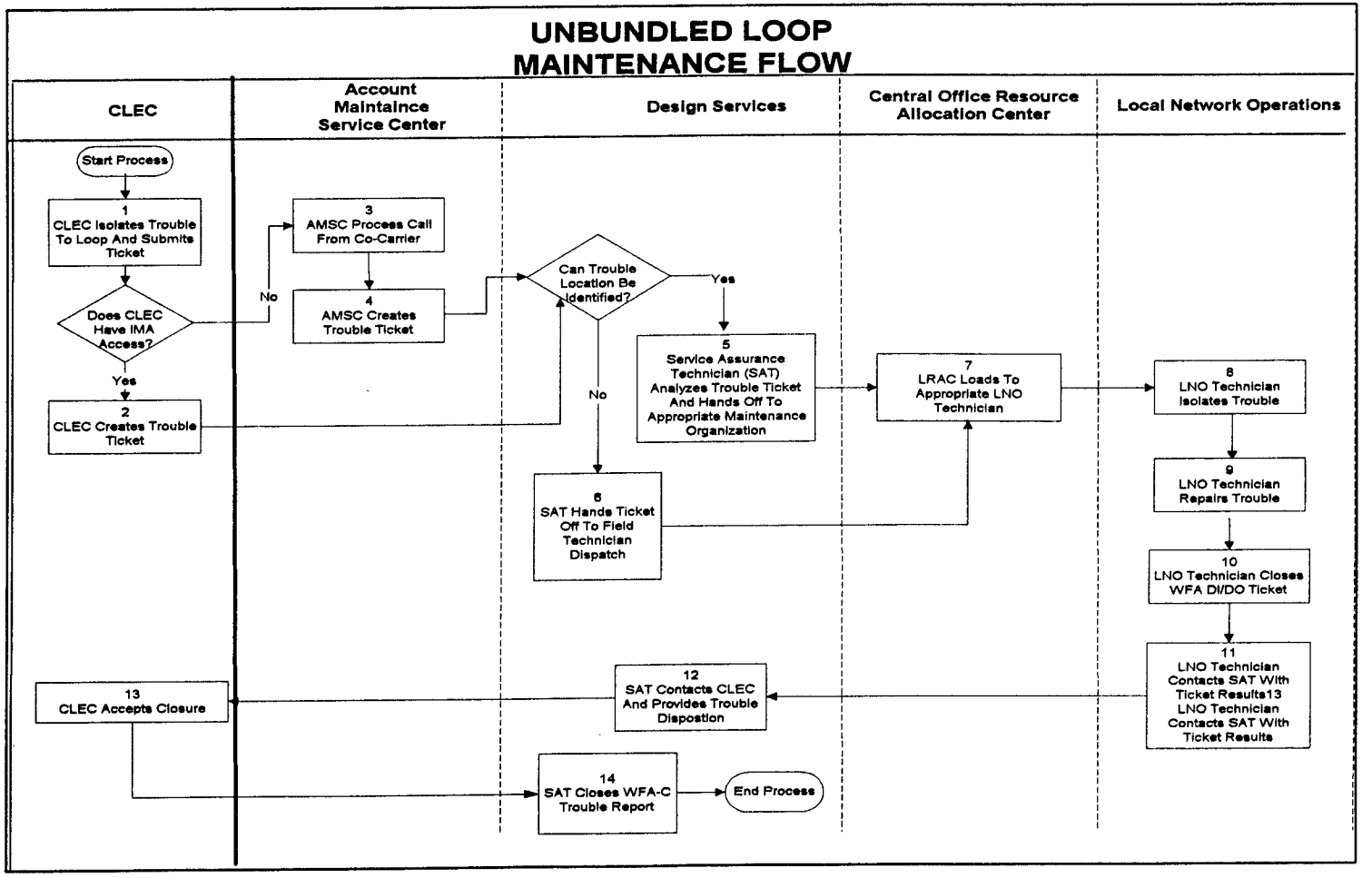

UNBUNDLED LOOP MAINTENANCE FLOW
CLEC
Account Maintaince Service Center
Design Services
Central Office Resource Allocation Center
Local Network Operations
Start Process
1 CLEC Isolates Trouble To Loop And Submits Ticket
Does CLEC Have IMA Access?
No
Yes
2 CLEC Creates Trouble Ticket
3 AMSC Process Call From Co-Carrier
4 AMSC Creates Trouble Ticket
Can Trouble Location Be Identified?
Yes
No
5 Service Assurance Technician (SAT) Analyzes Trouble Ticket And Hands Off To Appropriate Maintenance Organization
6 SAT Hands Ticket Off To Field Technician Dispatch
7 LRAC Loads To Appropriate LNO Technician
8 LNO Technician Isolates Trouble
9 LNO Technician Repairs Trouble
10 LNO Technician Closes WFA DI/DO Ticket
11 LNO Technician Contacts SAT With Ticket Results13 LNO Technician Contacts SAT With Ticket Results
12 SAT Contacts CLEC And Provides Trouble Disposition
13 CLEC Accepts Closure
14 SAT Closes WFA-C Trouble Report
End Process

EXHIBIT
B

-----Original Message-----
From: Christina Valdez [mailto:clvalde@uswest.com]
Sent: Thursday, August 12, 1999 8:16 AM
To: Menning, Terry, NCAM
Subject: Attachment for 8/12 Mtg

Terry,

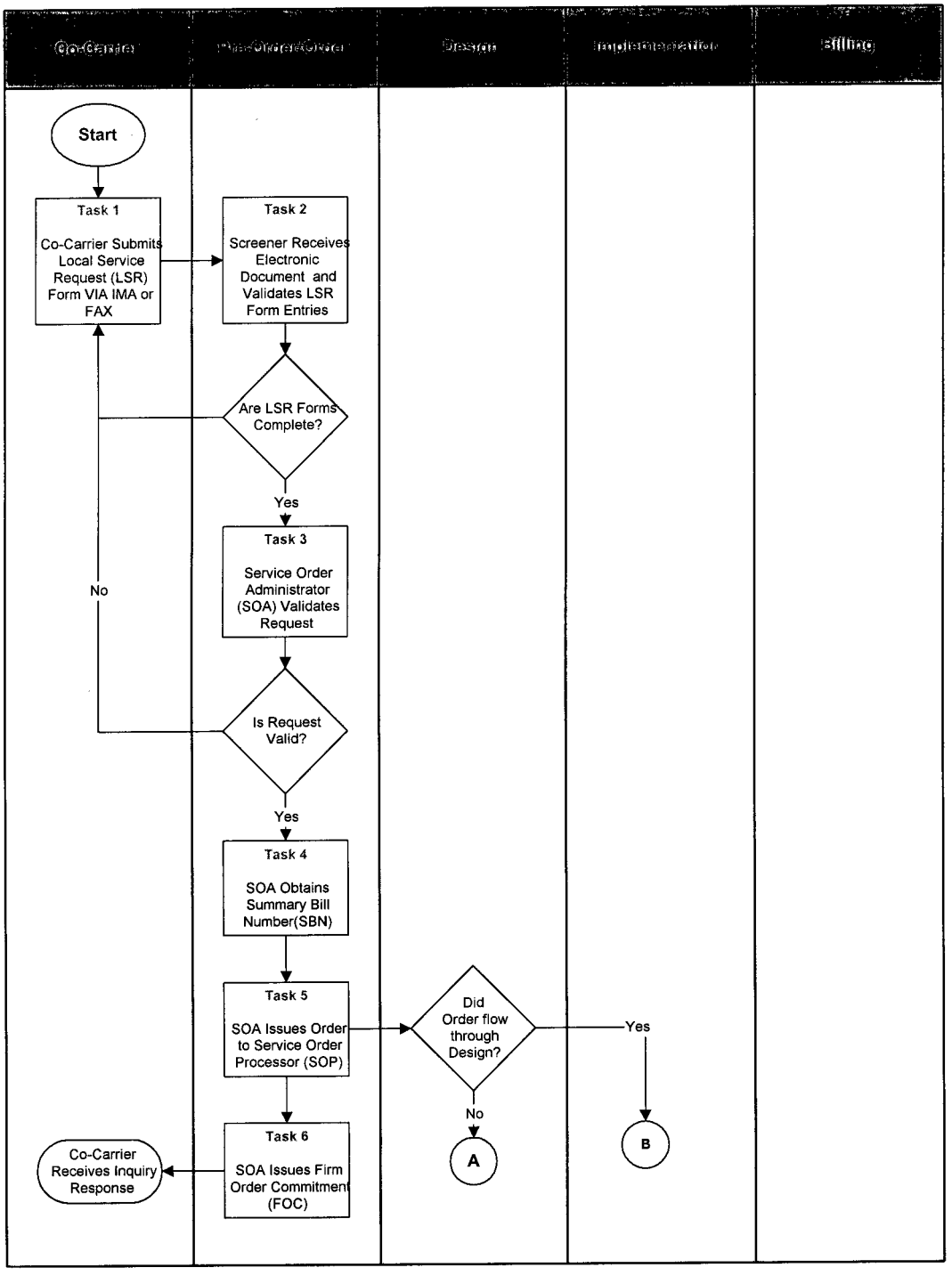
I apologize that I haven't gotten this to you sooner. I just got it this morning. I will have copies in the conference room. However, I thought you might need to forward this to your folks who will be calling in.

Thanks,
Christina Valdez
(303) 896-1517

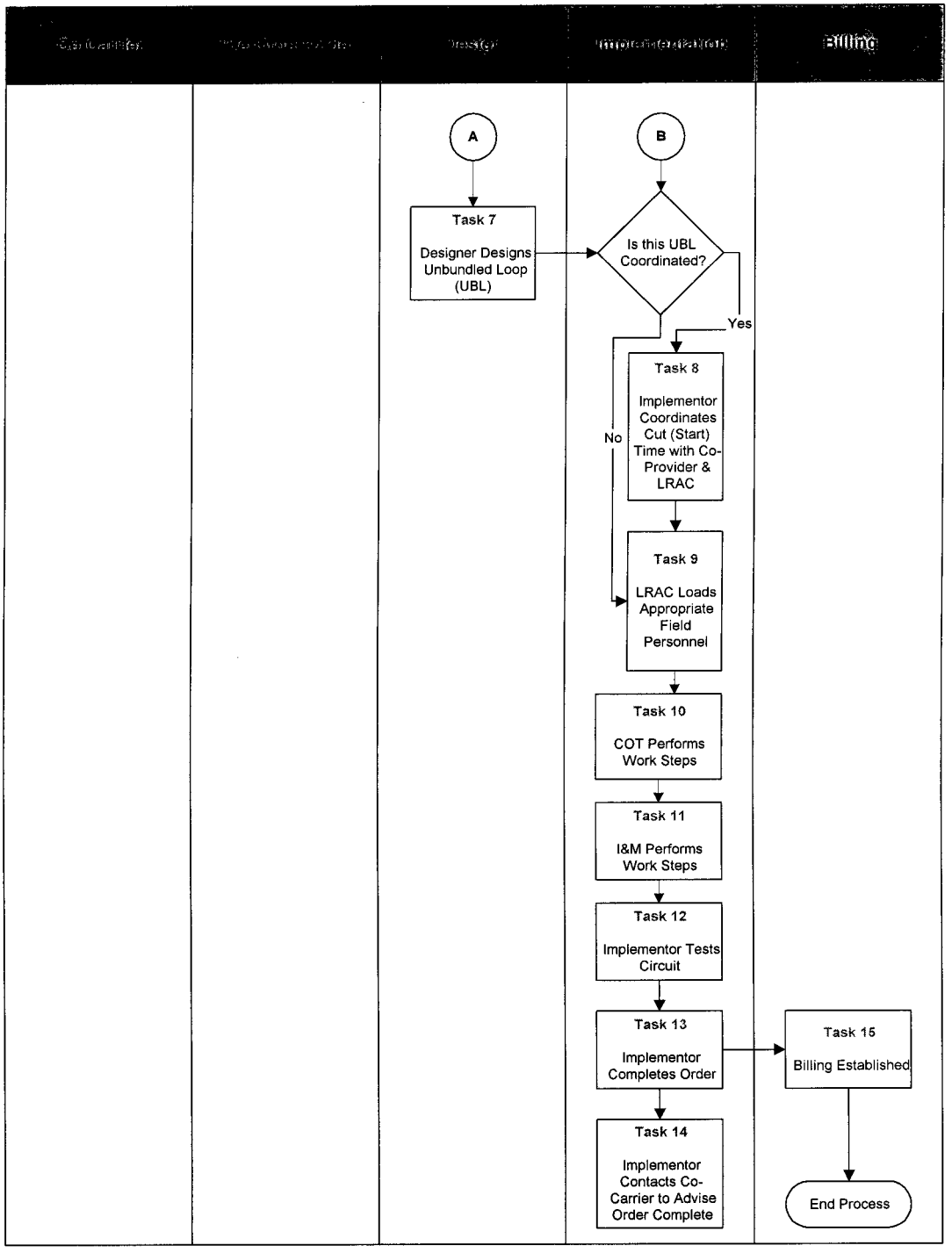
(See attached file: UBL.doc)

Lotus Manuscript 1.0

Unbundled Loop Provisioning Flow



Unbundled Loop Provisioning Flow



Task 1: **Co-Provider**
Responsible Organization: **Order Issuance Center**
Task Summary: **Co-Provider issues complete and accurate Local Service Request.**

Task 2: **Interconnect Service Center (ISC) Screener**
Responsible Organization: ICS
Task Summary: **Screener receives LSR and validates entries.**

- **Verifies the Co-Provider (Competitive Local Exchange Carrier) is certified.**
- **Verifies the Letter of Authorization (LOA)**
- **Determines if the request is complete and accurate; resolves questions.**

Task 3: Service Order Administrator (SOA)
Responsible Organization: **ICS**
Task Summary: **The SOA validates request.**

Determines if the request is complete and accurate; resolves questions.

- **Determines if request is for new service.**
- **Verifies the facilities in Facility Check.**
- **Validates the intervals provided by the Co-Provider.**

Task 4: **SOA**
Responsible Organization: **ICS**
Task Summary: **SOA Obtains Summary Bill Number (SBN)**

- **Establishes summary bill, if appropriate.**
- **Determines if end user's account has an outstanding balance or directory advertising.**

Task 5: **SOA**
Responsible Organization: **ICS**
Task Summary: **SOA issues orders into the service order processors**

Task 6: **SOA**
Responsible Organization: **ICS**
Task Summary: **SOA issues Firm Order Commitment (FOC)**

Task 7: **Designer**
Responsible Organization: **Des Moines Design Service Center**
Process Summary: **The Des Moines Design Service Center design and problem resolution functions for Unbundled Loops are the same standard process steps that apply to Special Access or non-switched Private Line. These are documented in the Design DS0 Process Guide and the Resolution Process Guide.**

The items listed below identify conditions that should be considered when processing orders for Unbundled Loops.

- **Transmission path from USW CO to End-user premises - 2- or 4-wire**
- **Order and Item Information (SOAC–TIRKS Message 1 Information and GOC)**
- **Design Related Information (SOAC-TIRKS Message 2 and DRI)**
- **Design Flow Through Information (C-MATE/OA and TIRKS Netted Flow Through)**
- **Work Description and Notes (SOAC-TIRKS Message 2, C-MATE and WA)**
- **Loop Information (SOAC-TIRKS Message 3 and LOOP2)**

- **Facility Routing and Selection (FEPS Transactions)**
- **Design and PRO-CDS**
- **Tie Cables (TIES)**
- **Plug-in Ordering**
- **DLRD and WORD Distribution**

Task 8: **Implementor/Tester**
Responsible Organization: **Des Moines Design Service Center**
Process Summary: **Implementor coordinates cut (start) time with Co-Provider and LRAC.**

Task 9: **Local Resource Administration Center(LRAC)**
Responsible Organization: **Designed Services OPS Support**
Process Summary: **LRAC loads appropriate field personnel to perform work steps.**

Load Specialist receives the provisioning work request.
Load Specialist determines installation type by screening Work Type/Job Type assigned.
Work Types/Job Types are defined in WFA-DI/WFA-DO and indicate the type of work and technician required to complete the work.
When Performance Testing is required, a Meet Time between Network Services Technicians is coordinated (internal coordination only). When a Co-Provider has requested a Coordinated Cut time, the Network Services Technicians are scheduled to accommodate the requested time. USW standard loading and coordination procedures are used.
Load Specialist loads appropriate Network Services Technician using USW standard loading procedures.

Task 10: **Central Office Technician(COT)**
Responsible Organization: **Network Services**
Process Summary: **Network Services Technician Identifies work type and wires the circuit according to the WORD DOC.**

- **COT receives work request (WFA-DI)**
- **COT identifies work request as Unbundled Loop.**
- **LX Service Code**
- **QC as the Protocol in the NCI code at the Central Office interconnect point**
- **Co-Provider name as the customer**

10-1 Basic Installation Option

10.1.1 **On the DD, the COT receives a telephone call from the I&M technician. The two technicians perform cooperative testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side). Test results are NOT provided to the Co-Provider.**

10.1.2 COT completes WFA-DI work steps.

10.2 Basic Installation with Performance Testing

10.2.1 **On the DD, the COT receives a call from the Des Moines Design Service Center Implementor.**

10.2.2 **The COT and I&M technician perform cooperative testing from the end user NID to the ICDF bay (vertical side).**

10.2.3 **Testing results provided to the Co-Provider.**

10.2.4 **COT completes WFA-DI work steps**

10.3 Coordinated Installation with Cooperative Testing Option

10.3.1 **On the DD, the COT receives a call from the Des Moines Design Service Center Implementor at the appointed coordination time. At that time, the COT lifts the wiring from the USW switch and lays down the tied back wiring connecting the Unbundled Loop to the ICDF bay.**

10.3.2 **The COT and I&M technician perform cooperative testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side).**

10.3.3 **The COT performs any additional testing requested by the Co-Provider.**

10.3.4 **The COT completes the C Order (USW disconnect) in COSMOS/FOMS.**

10.3.5 **COT completes WFA-DI work steps.**

10.4 Coordinated Installation without Cooperative Testing

10.4.1 **On the DD, the COT receives a call from the Des Moines Design Service Center Implementor at the appointed coordination time. At that time, the COT lifts the wiring from the USW switch and lays down the tied back wiring connecting the Unbundled Loop to the ICDF bay.**

10.4.2 **The COT completes the C Order (USW disconnect) in COSMOS/FOMS.**

10.4.3 **COT completes WFA-DI work steps.**

Task 11: Installation and Maintenance (I&M) Technician
Responsible Organization: **Designed Services**
Process Summary:

11.1 I&M technician receives work request (WFA-DI).

11.2 I&M technician identifies work request as Unbundled Loop.

- **LX Service Code**
- **QC as the Protocol in the NCI code at the Central Office interconnect point**
- **Co-Provider name as the customer**

11.3 I&M technician wires per the WORD document.

11.4 I&M technician verifies loop facility is free of electrical faults using USW standard testing procedures.

11.5.1 **Basic Installation Option**

11.5.1.1 I&M technician calls the COT.

11.5.1.2 The COT and I&M technician perform cooperative testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side).

11.5.1.3 **I&M technician notifies the Des Moines Design Service Center Implementor via a telephone call that the order work is completed.**

11.5.2 **Basic Installation with Performance Testing Option**

11.5.2.1 **The COT and I&M technician perform cooperative testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side).**

11.5.2.2 **Testing results provided to the Co-Provider.**

11.5.3 **Coordinated Installation with Cooperative Testing Option**

11.5.3.1 **I&M technician calls Des Moines Design Service Center Implementor at requested coordination time. The Des Moines Design Service Center Implementor name and telephone number is on the WFA-C *OSSLOG*. If I&M technician is unable to make the appointment, the LRAC is notified at least 30 minutes before appointment schedule. The LRAC will load an available technician to meet the appointment schedule. If no technician is available, the LRAC escalates to the I&M first level manager.**

11.5.3.2 **The COT and I&M technician perform testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side).**

11.5.3.3 **The COT performs any additional testing requested by the Co-Provider.**

11.5.4 Coordinated Installation without Cooperative Testing

11.5.4.1 **I&M technician calls Des Moines Design Service Center Implementor at requested coordination time. The Des Moines Design Service Center Implementor name and telephone number is on the WFA-C *OSSLOG*. If I&M technician is unable to make the appointment, the LRAC is notified at least 30 minutes before appointment schedule. The LRAC will load an available technician to meet the appointment schedule. If no technician is available, the LRAC escalates to the I&M first level manager.**

11.5.4.2 **The COT and I&M technician perform testing from the end user NID to the Central Office Demarc on the ICDF bay (vertical side).**

11.6 The I&M technician tags the NID using USW standard tagging policy guidelines.

11.7 I&M technician completes the WFA-DO work request. If I&M technician cannot complete the WFA-DO work request, the I&M technician notifies the LRAC via a telephone call to close the WFA-DO work request.

11.8 I&M technician provides test results to the Des Moines Design Service Center Implementor.

Testing Parameters:

Voice Grade Loops

- **1004 Hz Loss ≤ 8.5 dBm**
- **3 Tone Slope -1 to 9.0 dB relative to 1004 Hz**
- **C-Message (metallic) ≤ 20 dBrnC**
- **C-Notch (DLC) ≤ 45 dBrnC0**

Task 12: Implementor /Tester
Responsible Organization: **Des Moines Design Service Center**
Process Summary: **Implementor tests circuit.**

Task 13: Implementor /Tester
Responsible Organization: **Des Moines Design Service Center**
Process Summary: **Implementor Completes order.**

Task 14: Implementor /Tester
Responsible Organization: **Des Moines Design Service Center**
Process Summary: **Implementor contacts Co-Provider to advise order complete.**

Task 15: ICS Billing SDC
Responsible Organization: ICS
Task Summary: **Billing Established.**